



# Building Local Capacity to Prevent Prescription and Opiate Drug Abuse Before It Happens

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thanks to:

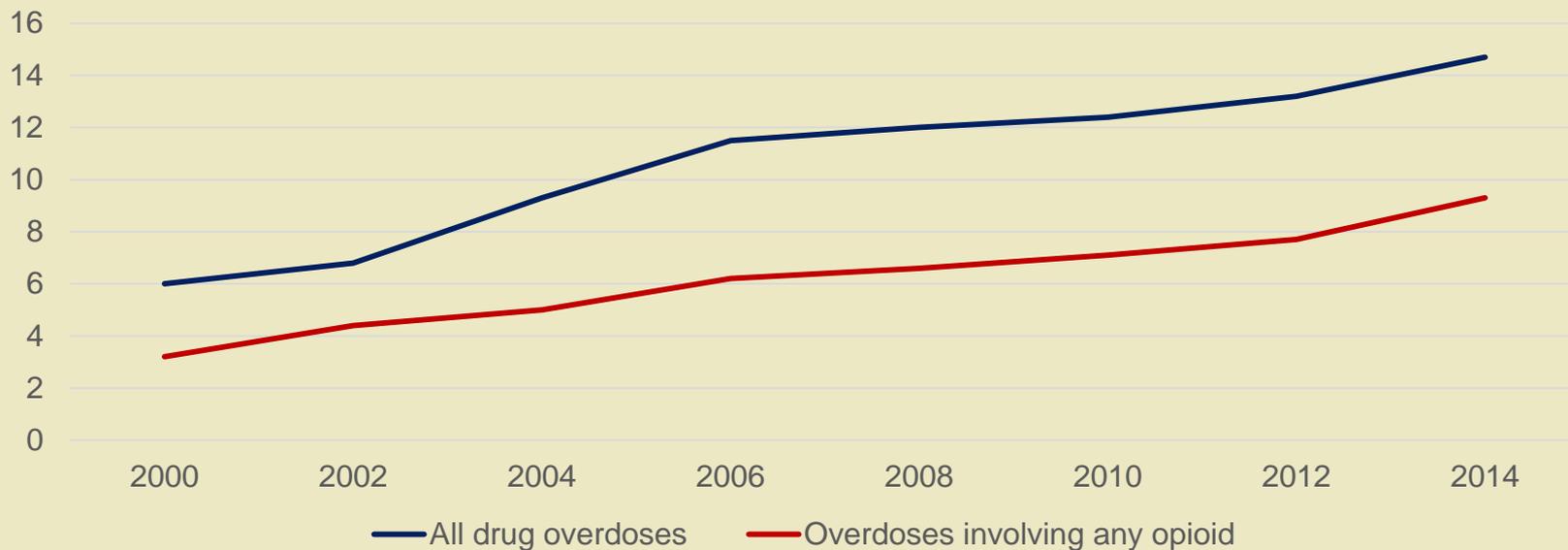
National Institute on Drug Abuse  
Center for Substance Abuse Prevention  
National Institute of Mental Health  
National Institute on Alcohol Abuse and Alcoholism

National Cancer Institute  
National Institute on Child Health and  
Human Development



# Age-adjusted rate of drug overdose deaths and drug overdose deaths involving opioids\*, United States, 2000-2014

## Deaths per 100,000 population



\*Age-adjusted death rates were calculated by applying age-specific death rates to the 2000 US standard population age distribution. Opioids include drugs such as morphine, oxycodone, hydrocodone, heroin, methadone, fentanyl, and tramadol. **Source: CDC**



# Shift in Causes of Mortality

- There has been a shift in the leading causes of mortality from infectious to non-communicable diseases and conditions.
- Behavioral health problems including drug overdoses contribute to this shift.

# Leading Causes of Mortality 15-24 Year Olds (2011, U.S.)

		Total deaths (per 100,000)
1	Motor Vehicle Crashes	15.9
2	Accidents	11.5
3	Intentional self harm (suicide)	10.7
4	Assault (homicide)	10.3
5	Malignant neoplasms	3.7
6	Diseases of heart	2.2
7	Congenital malformations, deformations and abnormalities	1.0
8	Influenza and pneumonia	0.5
9	Cerebrovascular diseases	0.4
10	Pregnancy, childbirth and the puerperium	0.4
--	All other causes (Residual)	11.1

48.8/100,000  
or 72% of all  
deaths

# Leading Causes of Mortality 15-24 Year Olds, American Indian/Alaskan Natives (2010, U.S.)

	Total deaths (per 100,000)
1 Intentional self harm (suicide)	20.9
2 Motor Vehicle Crashes	18.0
3 Accidents	9.9
4 Assault (homicide)	11.5
5 Drug-related overdose	3.2
6 Alcohol-related overdose and disease	2.6
7 Malignant Neoplasms	2.0
8 Diseases of Heart	1.9
9 Pregnancy, childbirth and the puerperium	0.7
10 Cerebrovascular diseases	0.5
-- All other causes (Residual)	9.7

**66.8/100,000**  
**or 82.6% of**  
**all deaths**



# Why Focus on Prevention?

(Hacker & Walker, 2013: AJPH)

- 50% to 60% of health outcomes are due to behavioral health problems.
- Only 10% of health outcomes are a result of treatment or medical care.



# Drug Abuse Prevention in the 1970's

- **Strategies:**
  - Information
  - Fear arousal
  - Just say “no”
- **Outcomes:**
  - No decreases in drug use
  - Some programs *increased* drug use (Tobler, 1986)

*Lesson: Untested good ideas can make things worse.*



# Paradigm Shift: A Public Health, Risk and Protection Focused Approach to Prevention

## To Prevent a Problem Before It Happens:

### 1. *Address its Predictors*

Research has Identified Predictors:

- Risk Factors (including ACEs)
- Protective Factors

### 2. *Develop Interventions to Target R/P Factors*

Risk Factors for Health & Behavior Problems	Substance Abuse	Delinquency	Teen Pregnancy	School Dropout	Violence	Depression & Anxiety
<b>Community</b>						
Availability of Drugs	•				•	
Availability of Firearms		•			•	
Community Laws and Norms Favorable Toward Drug Use, Firearms, and Crime	•	•			•	
Media Portrayals of the Behavior	•				•	
Transitions and Mobility	•	•		•		•
Low Neighborhood Attachment and Community Disorganization	•	•			•	
Extreme Economic Deprivation	•	•	•	•	•	
<b>Family</b>						
Family History of the Problem Behavior	•	•	•	•	•	•
Family Management Problems	•	•	•	•	•	•
Family Conflict	•	•	•	•	•	•
Favorable Parental Attitudes and Involvement in the Problem Behavior	•	•			•	
<b>School</b>						
Academic Failure Beginning in Late Elementary School	•	•	•	•	•	•
Lack of Commitment to School	•	•	•	•	•	
<b>Individual/Peer</b>						
Early and Persistent Antisocial Behavior	•	•	•	•	•	•
Rebelliousness	•	•		•	•	
Gang Involvement	•	•			•	
Friends Who Engage in the Problem Behavior	•	•	•	•	•	
Favorable Attitudes Toward the Problem Behavior	•	•	•	•	•	
Early Initiation of the Problem Behavior	•	•	•	•	•	
Constitutional Factors	•	•			•	•



Risk reduction is essential,  
but not enough

## *Build Protective/nurturing environments and individual strengths*

Protective factors predict less substance abuse, crime and violence, even in the presence of risk.

# Five Important Elements of Protection

## SOCIAL DEVELOPMENT STRATEGY

Opportunities

Skills

Recognition

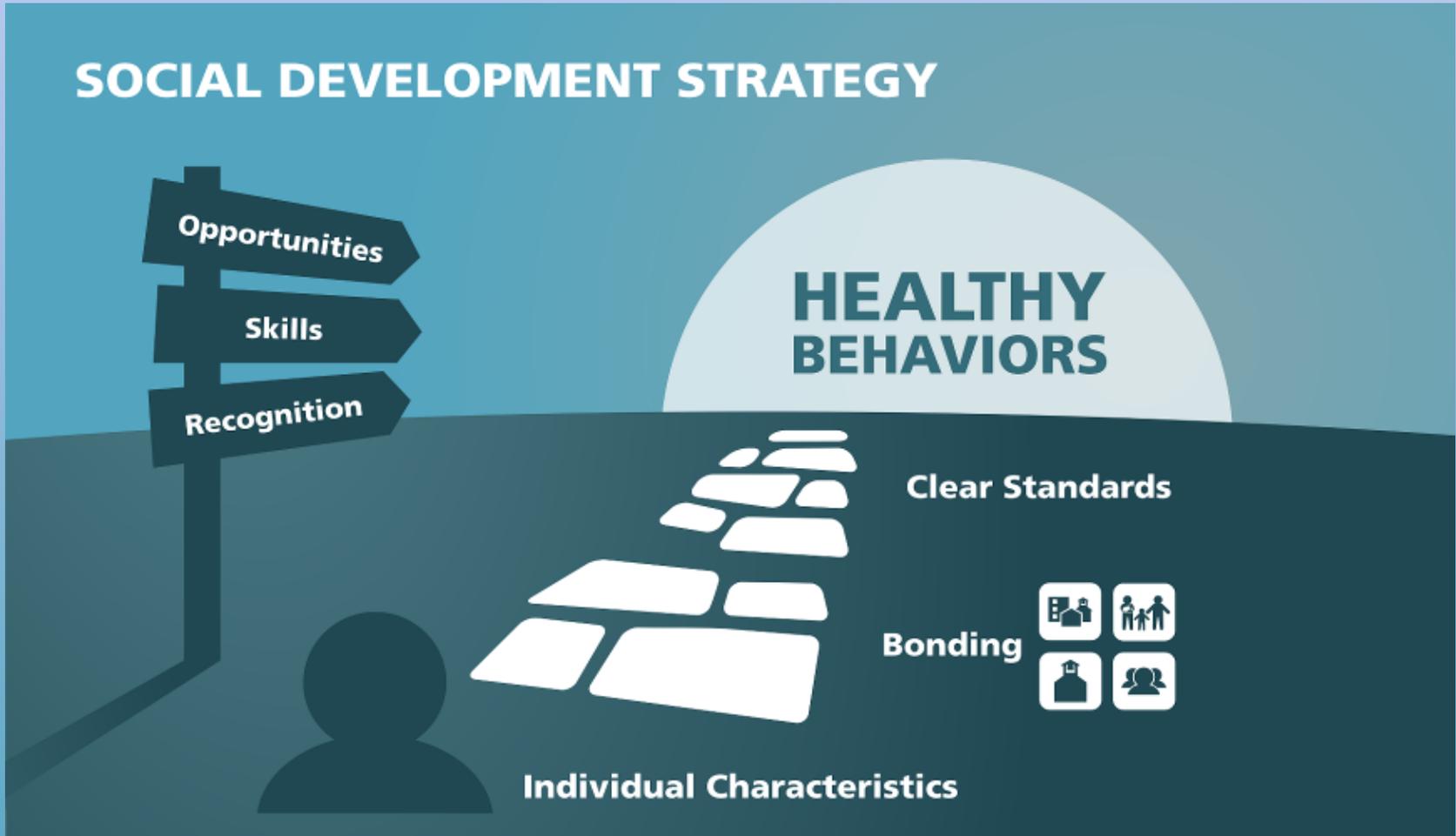
### HEALTHY BEHAVIORS

Clear Standards

Bonding



Individual Characteristics





# 36 Years of Research Advances

1. We know the **predictors**
2. We know **what works**





# Effective Prevention NRC & IOM (2009)

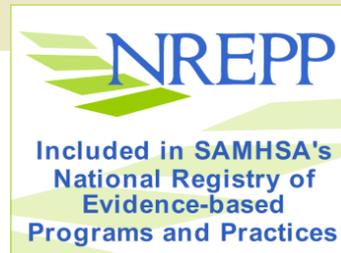
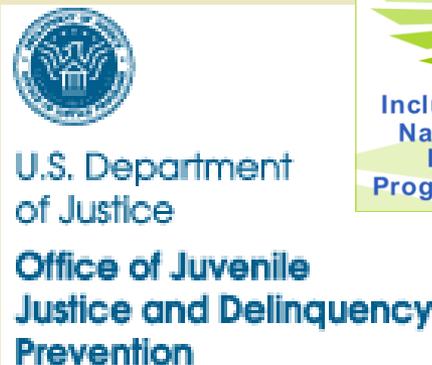
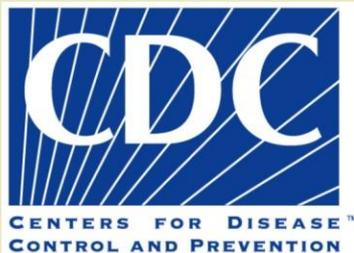
Controlled trials focused on reducing risk and strengthening protective factors have identified over **60** effective policies and programs proven to prevent behavioral health problems.

- **Effective programs:** [www.blueprintsprograms.com](http://www.blueprintsprograms.com)
- **Effective policies:** Anderson et al. 2009; Catalano et al. 2012; Hingson & White 2013; Vuolo et al., 2016; US Surgeon General, 2016.
- **Effective prevention saves money:** [www.wsipp.wa.gov](http://www.wsipp.wa.gov)

Lee, S., Aos, S., & Pennucci, A. (2015). *What works and what does not? Benefit-cost findings from WSIPP.*



# Recognition of Evidence-Based Programs



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# Effective Prevention *Programs*

## Examples:

Good Behavior Game, Life Skills Training,  
Positive Action, Project Northland,  
Raising Healthy Children, Incredible Years,  
Achievement Mentoring- Middle school, ATLAS,  
BASICS, Coping Power, Keep Safe,  
Familias Unidas, Strengthening Families 10-14,  
Strong African-American Families,  
Guiding Good Choices,  
MST, Functional Family Therapy



# Effective Prevention *Policies*

## Examples:

- Prescription Drug Monitoring Program PDMP (Patrick et al., 2016)
- PDMP with “Pill Mill Control” policies (Rutkow et al, 2015)
- Graduated Driver Licensing, Night Driving Restrictions, Social Host Liability,
- Increased Taxes - Alcohol & Tobacco,
- Minimum Legal Drinking Age –Age of Tobacco Possession,
- Tobacco Clean Air Restrictions-Smoking Bans,
- Alcohol & Tobacco Sales Restrictions (outlet density regulations, single cigarette & vending machine prohibitions)



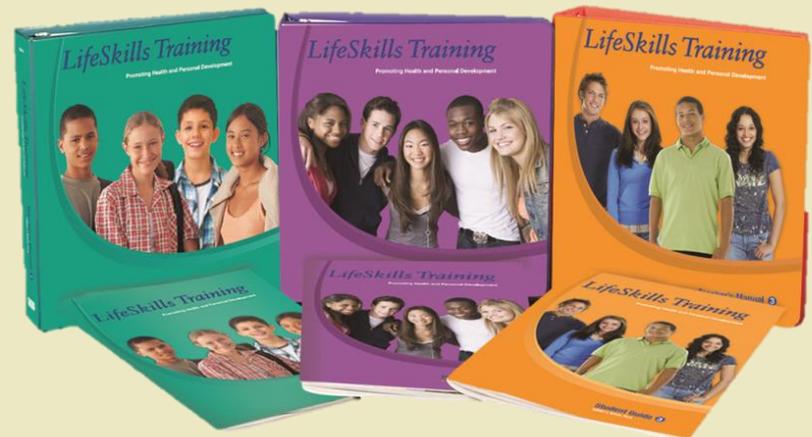
# Some programs prevent multiple behavioral health problems

Program	Drug use	Delinquency	Violence	School	Risky Sex	Mental health
Life Skills Training	✓	✓	✓		✓	
High Scope Preschool		✓	✓	✓		
Strong African American Families	✓	✓	✓	✓		
MST (Multisystemic Therapy)	✓	✓	✓	✓		✓
Good Behavior Game	✓	✓	✓		✓	✓



# Example: Life Skills Training

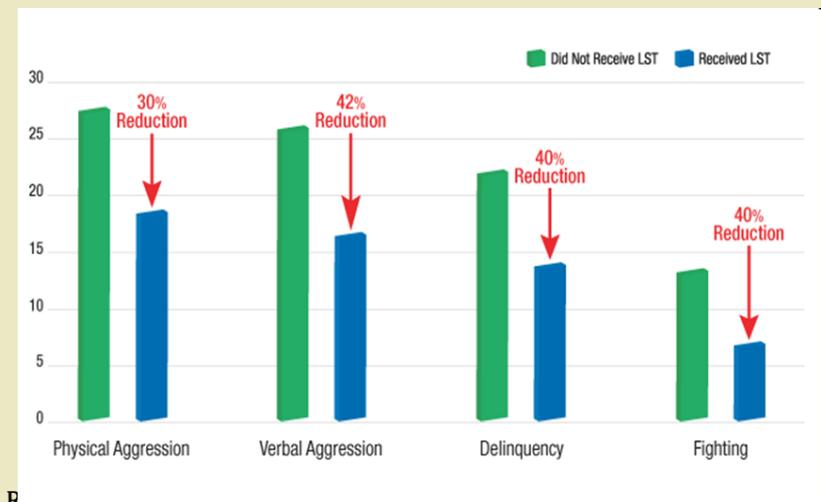
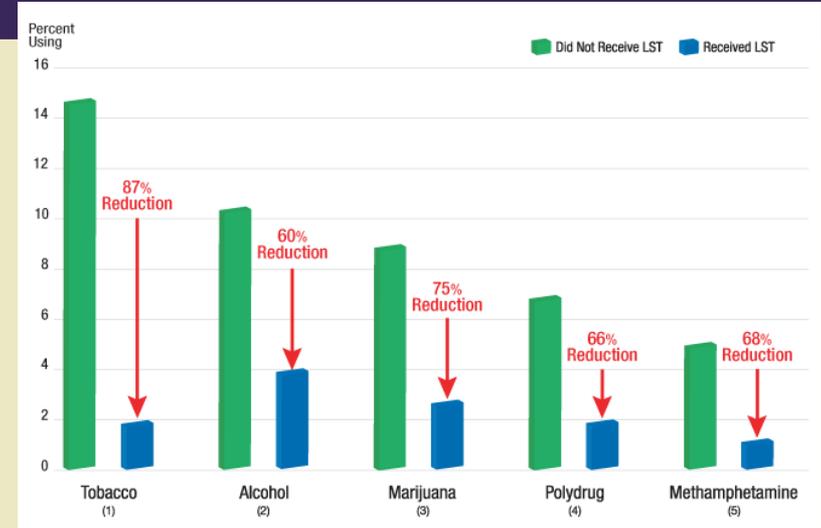
- Middle/JHS School
- Year 1: 15 sessions
- Year 2: 10 sessions
- Year 3: 5 sessions
- Interactive methods
- Provider Training
- Technical Assistance





# Effectiveness

- 32 published studies
- Randomized Trials
- Short and long-term
- SA and violence
- Diverse populations
- Different providers
- Multiple replications
- \$17.25 benefit -\$1 cost (WSIPP, 2016)

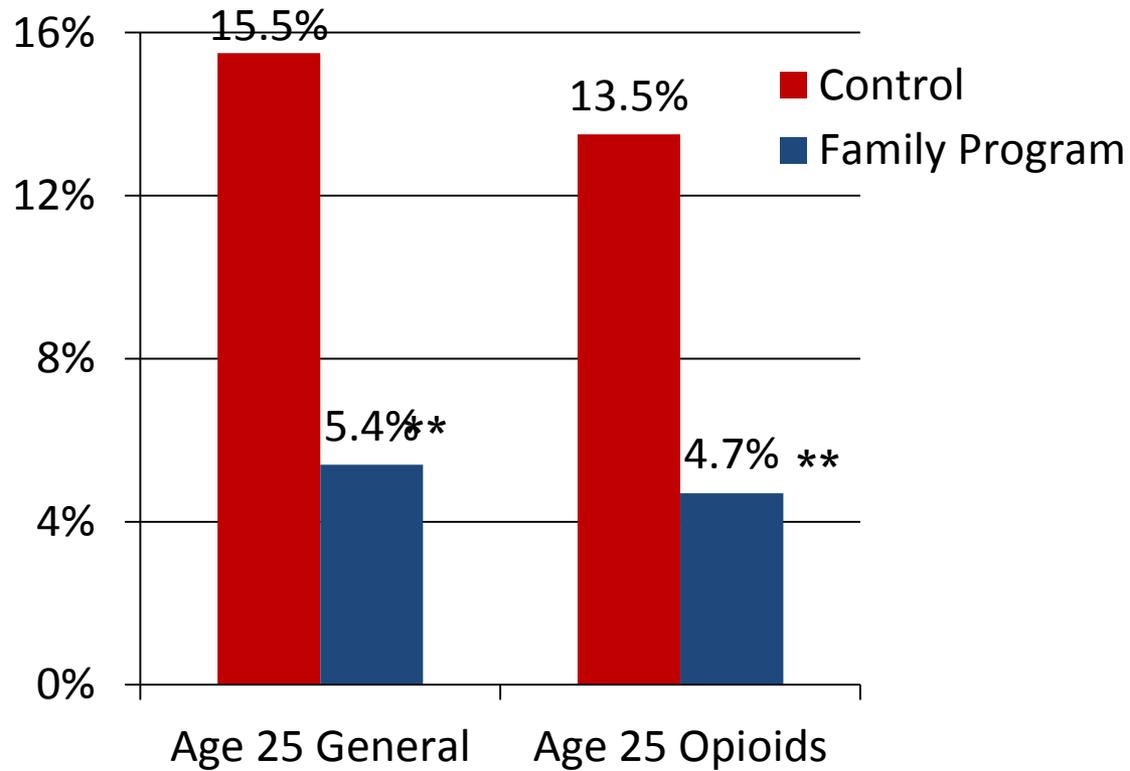


# Strengthening Families 10-14 Program

- Population - Universal
  - All families with children entering adolescence
- Objectives
  - Enhance family protective factors
  - Reduce family-based risk factors for child problem behaviors
- Administration/Program Length
  - **7 weekly two-hour sessions**
  - **All but one session include one hour for separate parent and child training and one hour for family training**
- Parent and Child Involvement
  - Children and parents attend all sessions



# Strengthening Families 10-14 Reduced Prescription and Opioid Drug Misuse



In this study, for 100 young adults in general population starting prescription drug abuse, only 35 young adults from a Strengthening Families 10-14 community started.

\*\* p<.01;

Notes: General=Non prescribed use of narcotics or CNS depressants or stimulants.

Source: R Spoth et al. *American Journal of Public Health* 2013



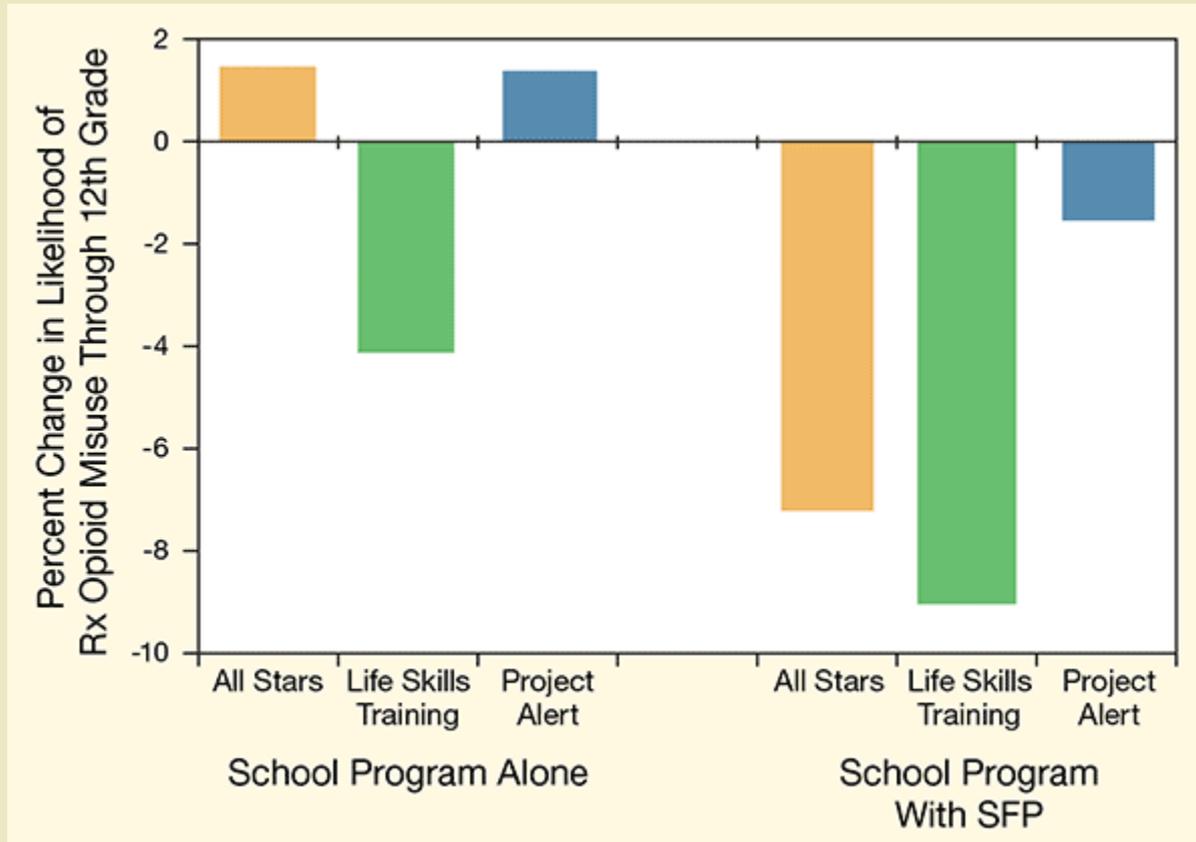
# Benefits versus costs of Strengthening Families 10-14

Return of \$5.00 for every \$1 invested.  
(Washington State Institute for Public Policy, 2016)



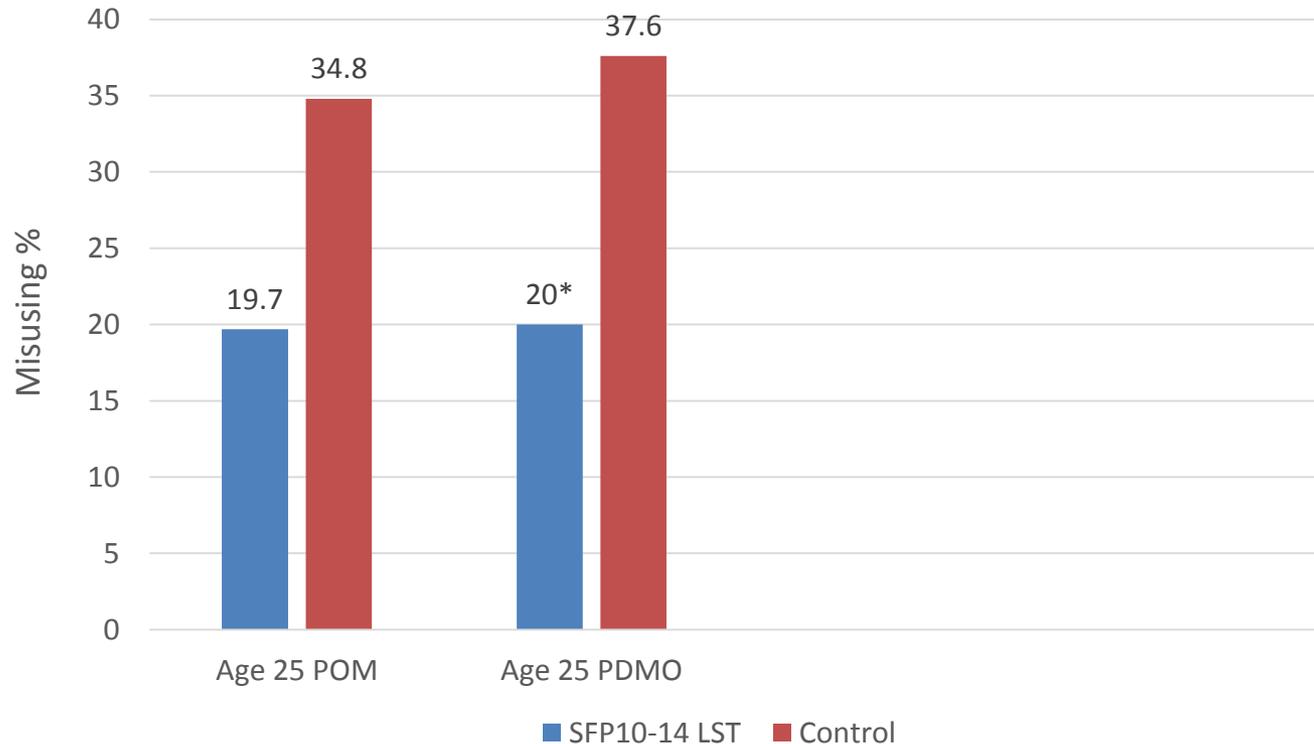
# Combining School and Family Programs to Prevent Teen Opioid Misuse

Source: NIDA Notes (December 2015)



# Combined Life Skills Training and Strengthening Families 10-14

## Effects for High-Risk Subsample



Note. PDMO = prescription drug misuse overall; POM = prescription opioid misuse; \*P < .05; \*\*P < .01.

Spoth, Trudeau, Shin, Ralston, Redmond, Greenberg, & Feinberg (2013). Longitudinal effects of universal preventive intervention on prescription drug misuse: Three RCTs with late adolescents and young adults. *American Journal of Public Health*, 103(4), 665-672.



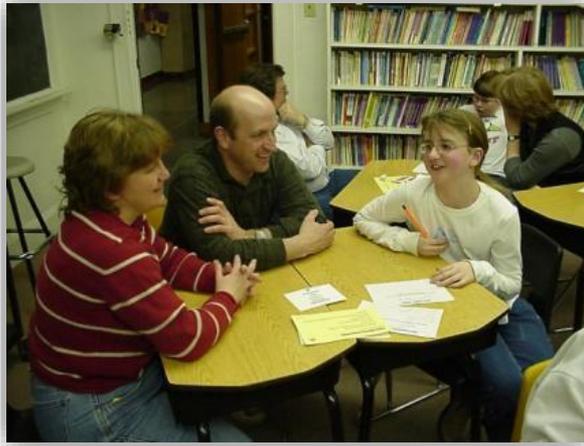
# PROSPER –Community Prevention System

## The Community Team

- PROSPER Community Teams **between 8-10 members including:**
  - Extension-based Team Leader (average 10 hours/week)
  - School-based Co-team Leader (about 1 hour/week)
  - Community volunteers (about 3 hours/month)
    - \* Local mental health/public health representatives
    - \* Local substance abuse agency representative
    - \* Parents
    - \* Youth



# PROSPER - Menu of School and Family Focused Prevention Programs

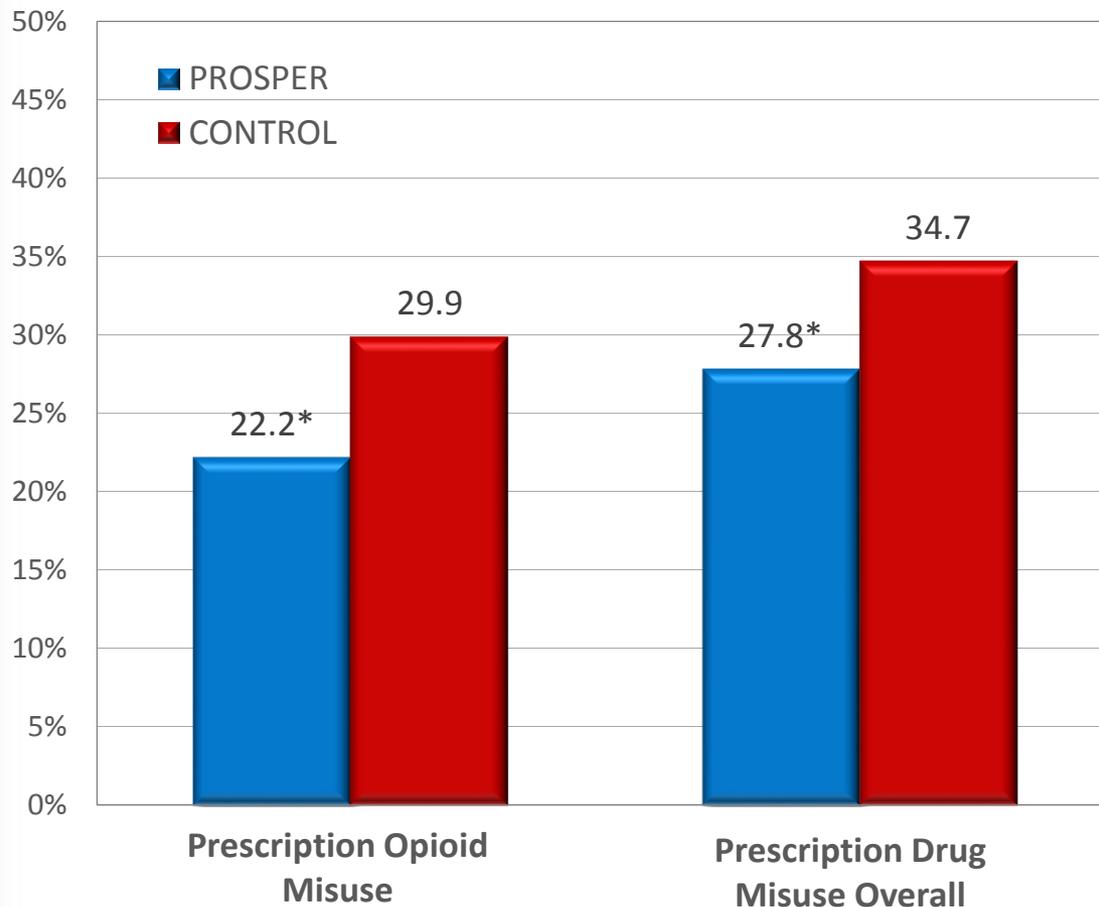


- Family-focused Programs
  - Guiding Good Choices
  - Strengthening Families Program: For Parents and Youth 10-14

- School-based Programs
  - Life Skills Training
  - Project Alert
  - All Stars



# PROSPER Long-term Impact on Young Adult Prescription Drug Misuse



**PROSPER vs. control differences are practically significant: For every 100 misusers in non-PROSPER communities, there will be about 20-26 fewer in PROSPER communities.**

Note: \* $p < .05$ , RRRs=20-26%. Source: Spoth et al., Long-term effects of the PROSPER delivery system for universal prevention: Emerging adult substance misuse and associated risk behavior outcomes. Manuscript under review.



# Example: Nurse Family Partnership

David Olds, Ph.D.

- Home visitors are trained public health nurses
- Guideline-driven and family-centered
- Visit from pregnancy through child age 2
- Visit 2-4 times a month: weekly during 1st mo., every other week through pregnancy, weekly for 1st 6 weeks postpartum, & every other week until 2<sup>nd</sup> birthday
- Caseload of 25 families per full-time nurse

# Evidence of NFP Effects: Elmira Follow-Up

Produced reductions of 40% - 60% in...

- Child abuse and neglect
- Arrest rate and convictions of the mothers (for poor, unmarried women)
- Arrest rate of juveniles (for children of poor, unmarried women)
- **Problems associated with drug and alcohol abuse by mothers (poor, unmarried women)**
- 25% reduction in smoking during pregnancy (poor, unmarried)
- Benefit over cost: \$1.61 return on \$1 invested (WSIPP, 2016).



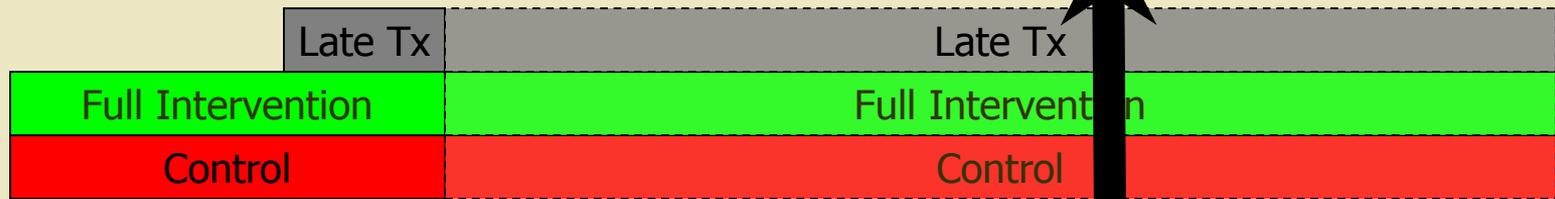
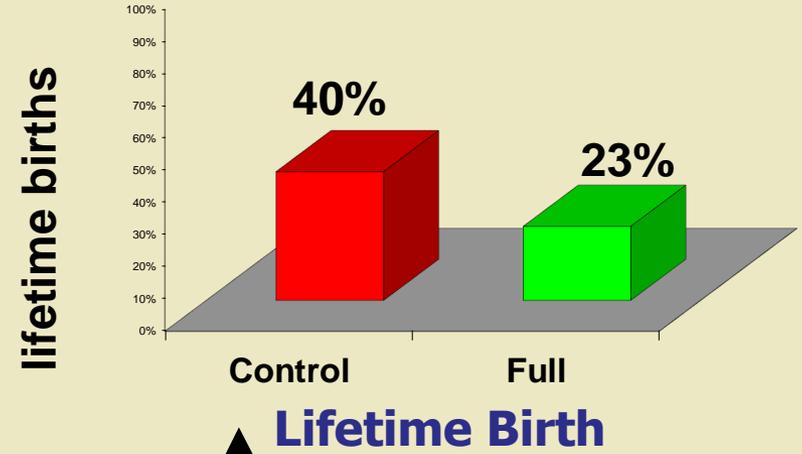
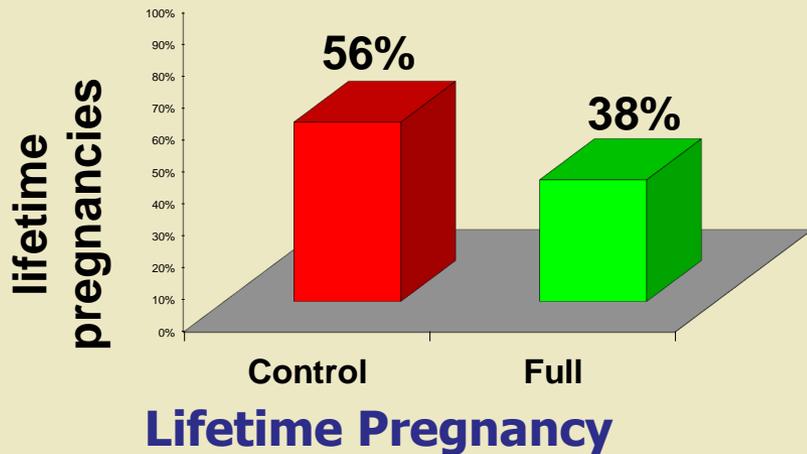
## Example: Seattle Social Development Project (Raising Healthy Children – RHC)

- Teacher training in classroom instruction and management – Grades 1-6
- Parent training in behavior management and academic support – Grades 1-3, 5-6
- Child social, emotional and cognitive skill development – Grades 1-2



# Fewer Pregnancies and Births among Teenage Girls

## Among Females At age 21

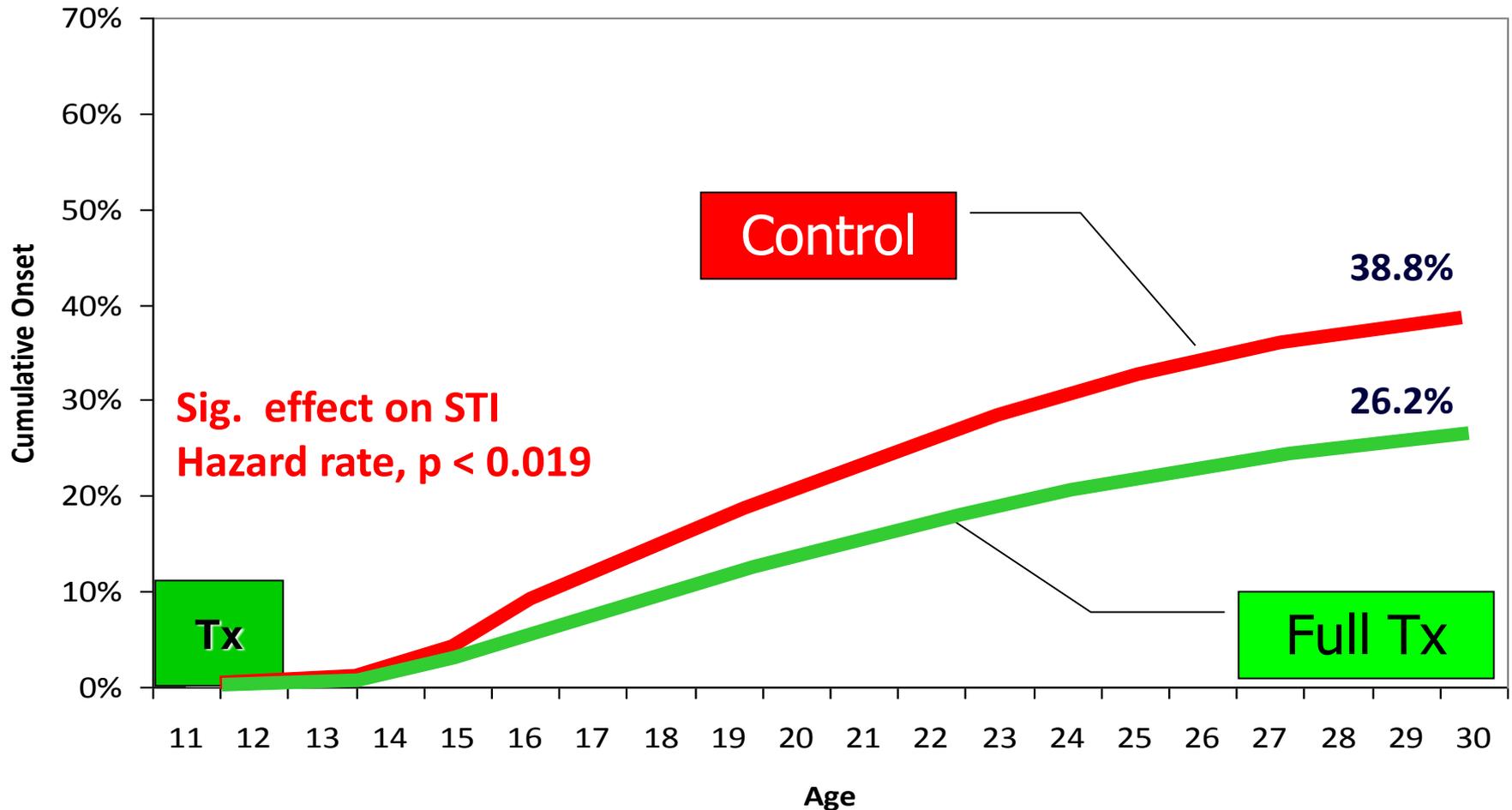


Grade 1 2 3 4 5 6 7 8 9 10 11 12

Age 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27

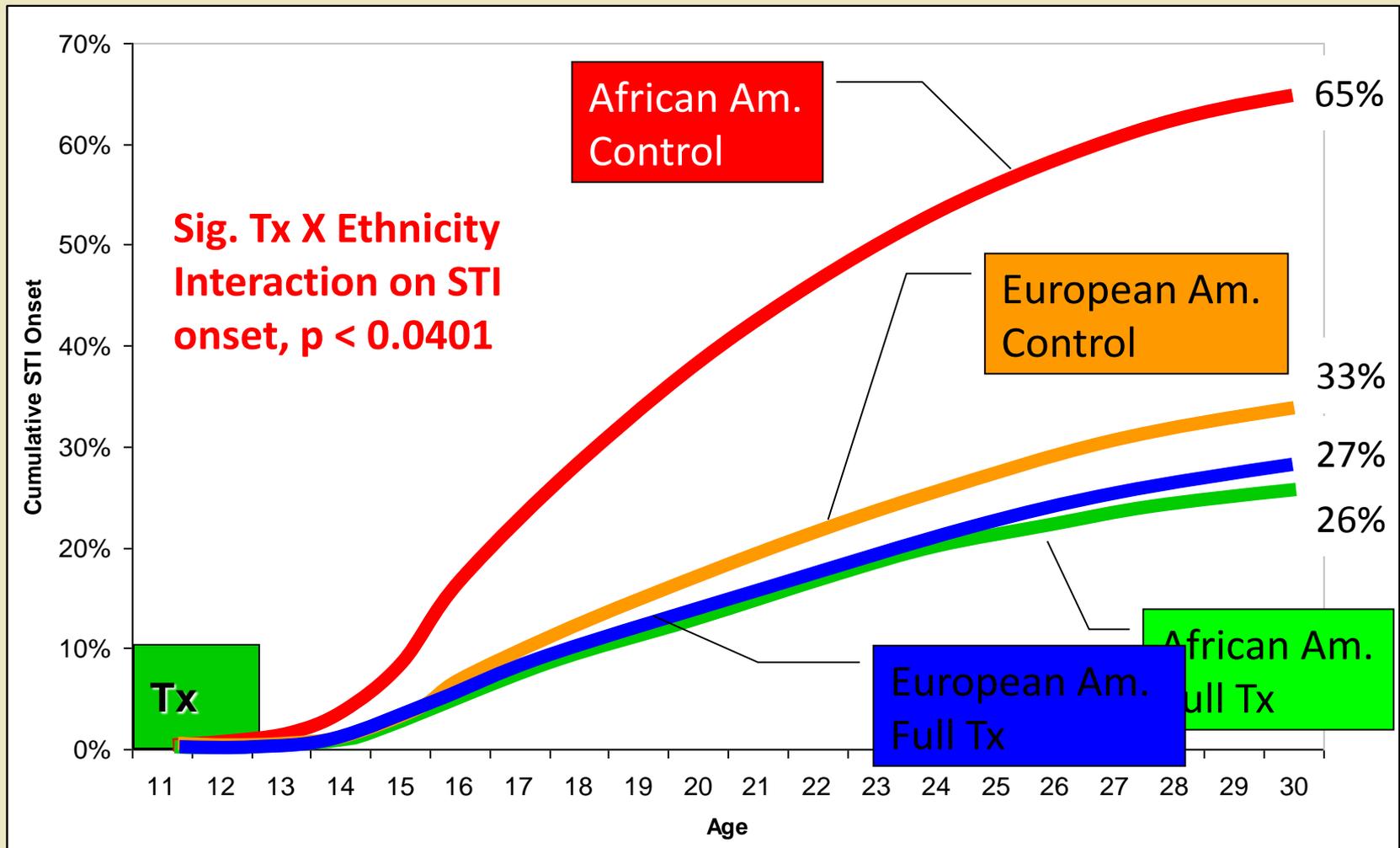


# Effects on sexually transmitted infection onset through age 30



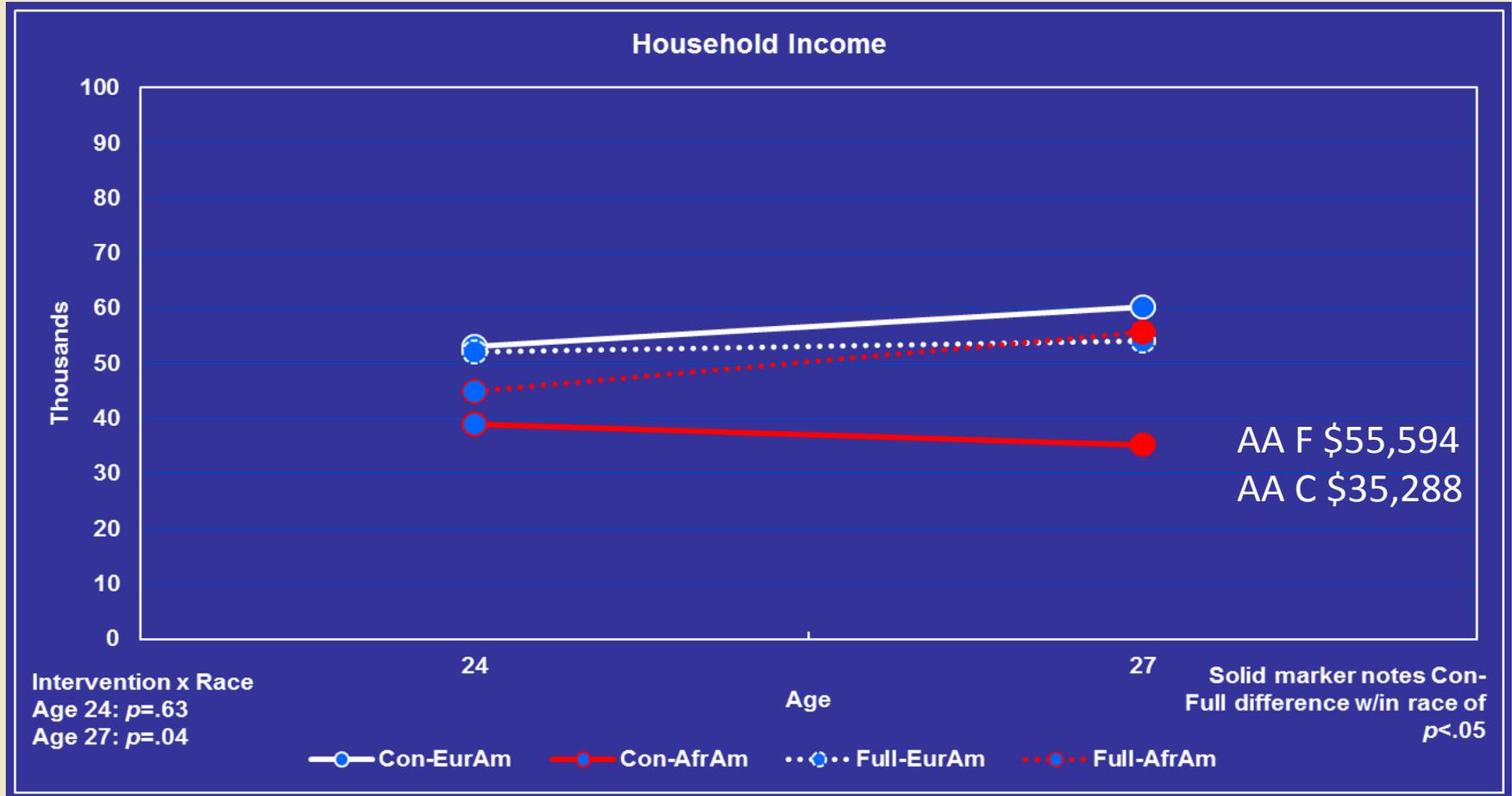


# RHC Eliminated Racial Disparity in Sexually Transmitted Infections





# RHC Reduced Racial Disparity in Household Income





# Benefit versus Costs of Raising Healthy Children

Return of \$4.27 for every \$1 invested.  
(Washington State Institute for Public Policy, 2016)



All these behavioral health problems of young people have been prevented in controlled trials

[www.blueprintsprograms.com](http://www.blueprintsprograms.com)

**Anxiety**

**Depression**

**Autistic  
Behaviors**

**Alcohol,  
tobacco, other  
drug misuse**

**Risky  
driving**

**Aggressive  
behavior and  
conduct  
problems**

**Delinquent  
behavior**

**Violence**

**Self-  
inflicted  
injury**

**Risky  
sexual  
behavior**

**School  
dropout**



# Summary: Advances of Prevention Science



1. Risk and Protection Focus
2. Social Development Strategy
3. Tested and Effective Programs/Policies

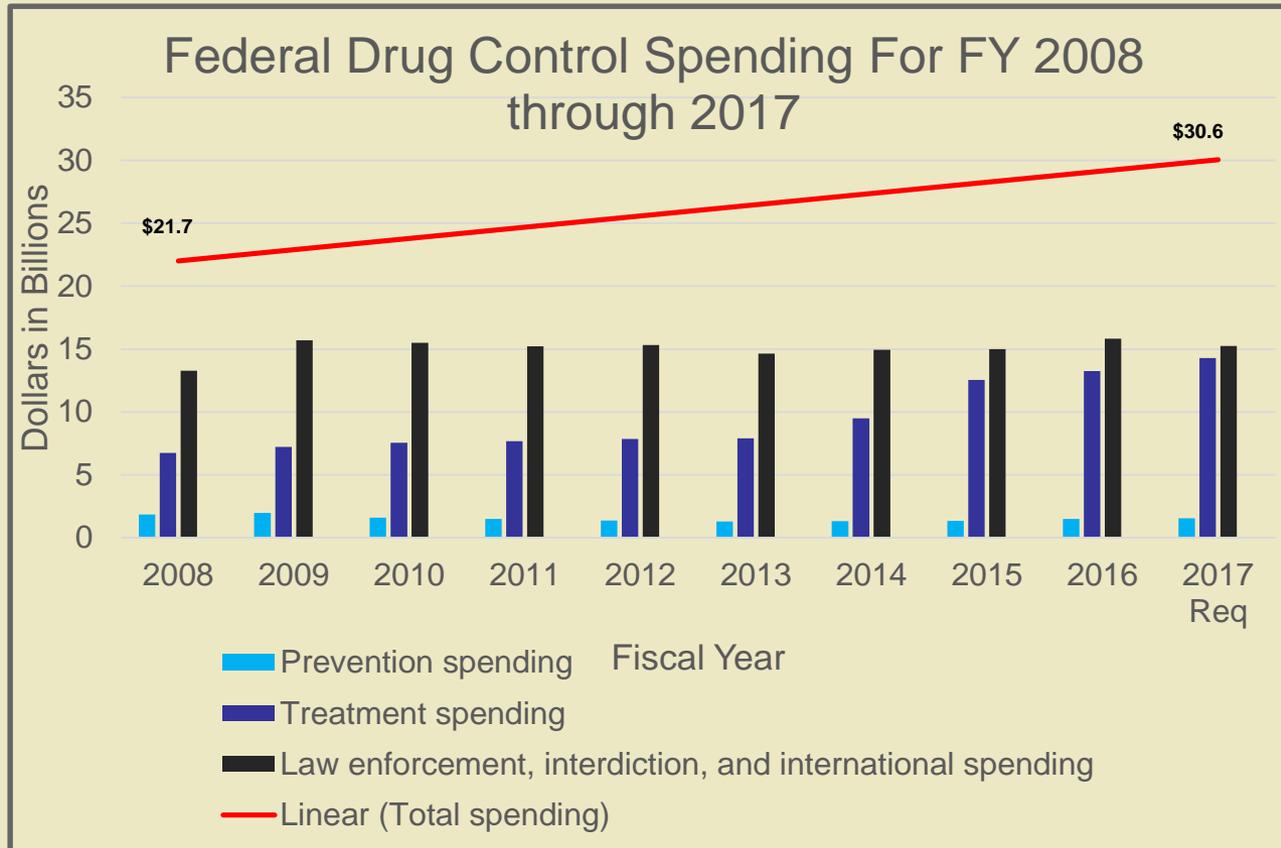


*“According to the Office of National Drug Control Policy, the most effective way to mitigate the costs associated with illicit drug use is through prevention.”*

*Source: Comptroller General’s Forum, U.S. Government Accountability Office, 2016*



How much are we investing in prevention compared to treatment and law enforcement?



Source: Office of National Drug Control Policy National Drug Control Budget Funding Highlights for Fiscal Years 2016 & 2017.



# Implications

- Effective Prevention is within our Reach
  - We Must Increase Investment in Prevention Programs and Policies Proven to Work if We Want to Reduce Prescription and Opioid Drug Misuse.
- Leverage Prevention Power
  - Combine Interventions Shown to Prevent Multiple Behavioral Health Problems including Opioid Addiction.



# Think, Pair, Share



What did I hear worth remembering?



What do we want to ask or discuss with David?



## Despite this progress...

Tested and effective interventions for preventing behavioral health problems are not widely used. We are not investing in prevention!

*In fact...*

When we do invest, prevention approaches that do not work or have not been evaluated are more widely used than those shown to be **effective**. (Ringwalt, Vincus, et al. 2009)



# How do we ensure the healthy development of *all* youth?





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that care**

**Strong Communities, Successful Kids**

Build community capacity to choose and implement effective preventive interventions that address prevalent risks and strengthen protection against behavioral health problems.



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# The Challenge for Community Prevention: Different Communities, Different Needs



Different  
Norms &  
Values



Different  
levels of risk  
and  
protection



Different  
youth  
problem  
behaviors



Different  
resources &  
capacity



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## Example: Communities That Care

A system for building local capacity to choose and implement effective preventive interventions that address prevalent risks and strengthen protection against behavioral health problems.



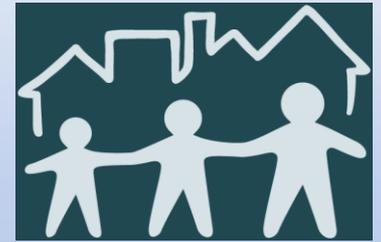
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# Communities That Care = Powerful Results



- 33% tobacco
- 32% alcohol
- 25% delinquent behavior

*A large trial of Communities That Care produced reductions in drug use and delinquency.*



How do CTC communities get these results?

# Building Protection into Daily Interactions with Young People

## SOCIAL DEVELOPMENT STRATEGY



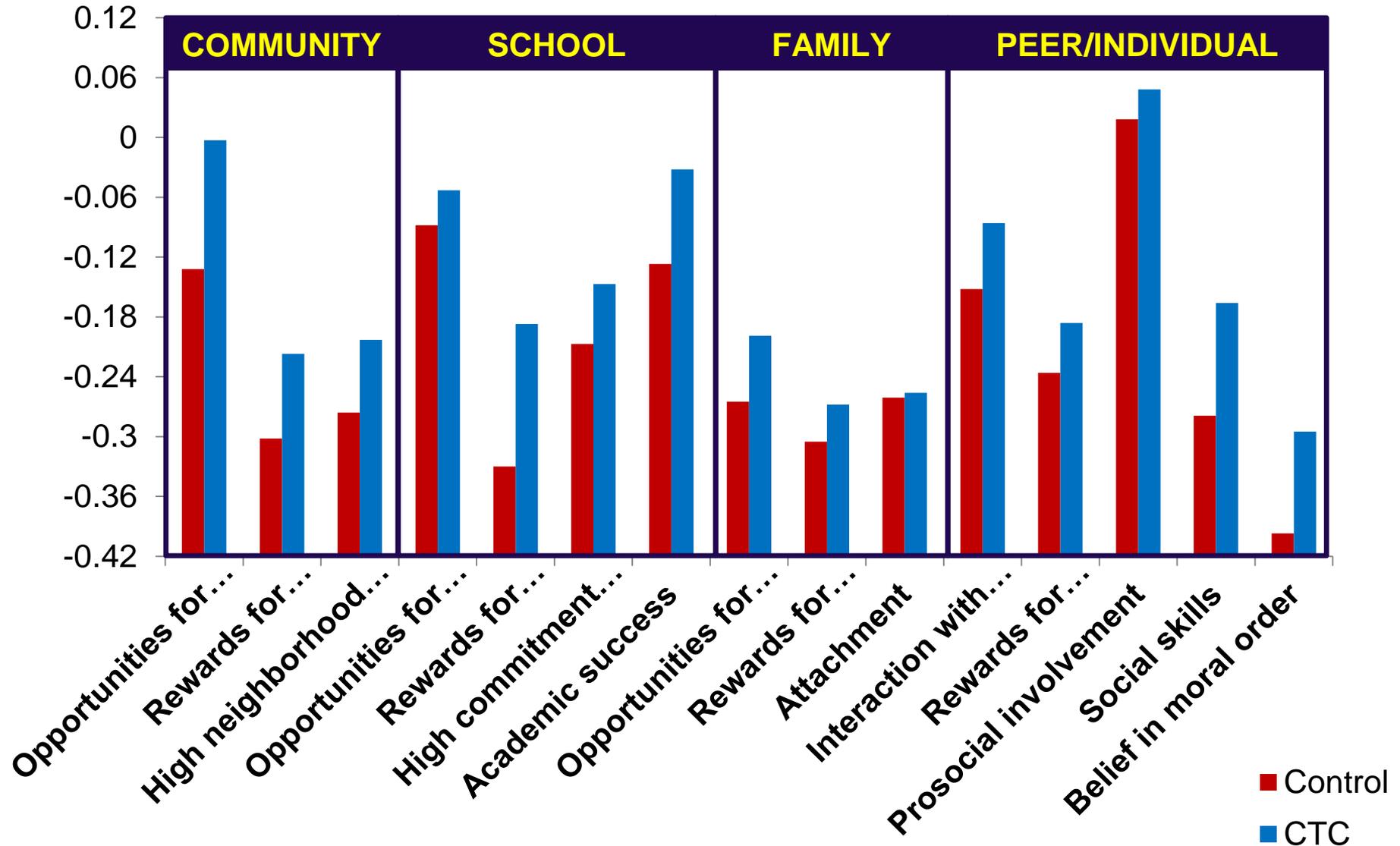
Clear Standards

Bonding



Individual Characteristics

# 8<sup>th</sup> Grade Protection CTC vs Control





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## Communities That Care Core Elements

- **Uses a public health approach** to prevent youth problem behaviors by addressing risk and protective factors
- **Community owned and operated:** carried out by a coalition of community stakeholders from all sectors
- **Data Driven:** the community makes its decisions using the community's own data
- **Evidence Based:** adoption and expansion of effective programs & policies
- **Outcome Focused:** measures changes in community levels of adolescent behavior problems; improvements in child & youth well-being



# CTC - A Continuous Improvement Process



# How CTC is organized



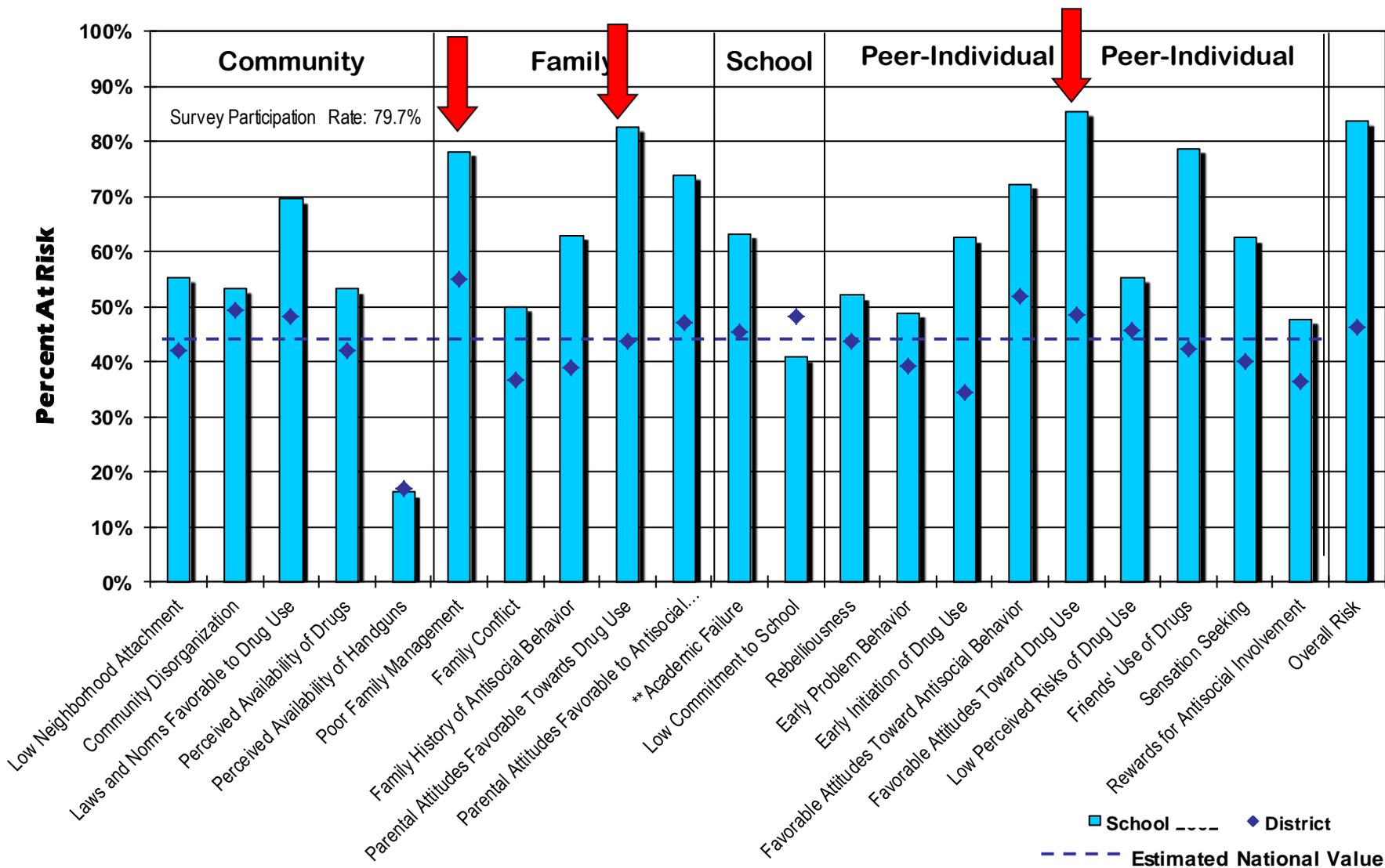
**CTC solves real problems in each community by giving kids a real voice.**



# CTC Youth Survey

- Assesses young peoples' experiences and perspectives.
- Provides valid and reliable measures of risk and protective factors across state, gender, age and racial/ethnic groups.  
(Arthur et al., 2002; Glaser et al., 2005)
- Identifies levels of risk and protective factors and substance use, crime, violence and depression for state, district, city, school, or neighborhood.
- Provides a foundation for selection of appropriate tested, effective actions.
- Monitors effects of chosen actions by repeating surveys every two years.

## High School "N" Risk Profile 10th Grade





**Each CTC community selects the right evidence-based programs for its unique needs.**

# Blueprints for Healthy Youth Development

[ABOUT US](#)

[ASSESS NEEDS](#)

[BLUEPRINTS CRITERIA](#)

[VIEW ALL PROGRAMS](#)

[PROGRAM SEARCH](#)

[NOMINATE PROGRAM](#)

[RESOURCES](#)

**BLUEPRINTS: YOUR RESOURCE FOR  
HEALTHY YOUTH DEVELOPMENT PROGRAMS**

*FIRST TIME HERE?  
TRY OUR STEP-BY-STEP SEARCH APPROACH*

*GET STARTED >>*



## FIND WHAT WORKS

Match your children's needs to cost-effective programs that meet the highest scientific standard of evidence for promoting youth behavior, education, emotional well-being, health, and positive relationships.

View videos: ["Why Use Blueprints"](#) and ["How Blueprints Helps."](#)



**We review and rate programs that promote positive youth development.  
Find a program that matches your needs with the tools below, or view our entire [List of Programs](#) »**



# Effective Programs Implemented in CTC Trial

## School-Based

- All Stars Core
- Life Skills Training (LST)
- Lion's Quest SFA (LQ-SFA)
- Project Alert
- Olweus Bullying Prevention Program
- Towards No Drug Abuse (TNDA)
- Class Action
- Program Development Evaluation Training



## Selective After school

- Participate and Learn Skills (PALS)
- Big Brothers/Big Sisters
- Stay SMART
- Tutoring
- Valued Youth



## Family Focused

- Strengthening Families 10-14
- Guiding Good Choices
- Parents Who Care
- Family Matters
- Parenting Wisely



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## Numbers exposed to effective programs

Program Type	2004-05	2005-06	2006-07	2007-08
<b>School-Based</b>	<b>1432</b>	<b>3886</b>	<b>5165</b>	<b>5705</b>
<b>After-school*</b>	<b>546</b>	<b>612</b>	<b>589</b>	<b>448</b>
<b>Family Focused</b>	<b>517</b>	<b>665</b>	<b>476</b>	<b>379</b>

*Note:* Total eligible population = 10,030.

\*Includes PALS, BBBS, Stay SMART, and Tutoring programs

(Fagan et al., 2009)



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## CTC Implementation Fidelity Monitoring System

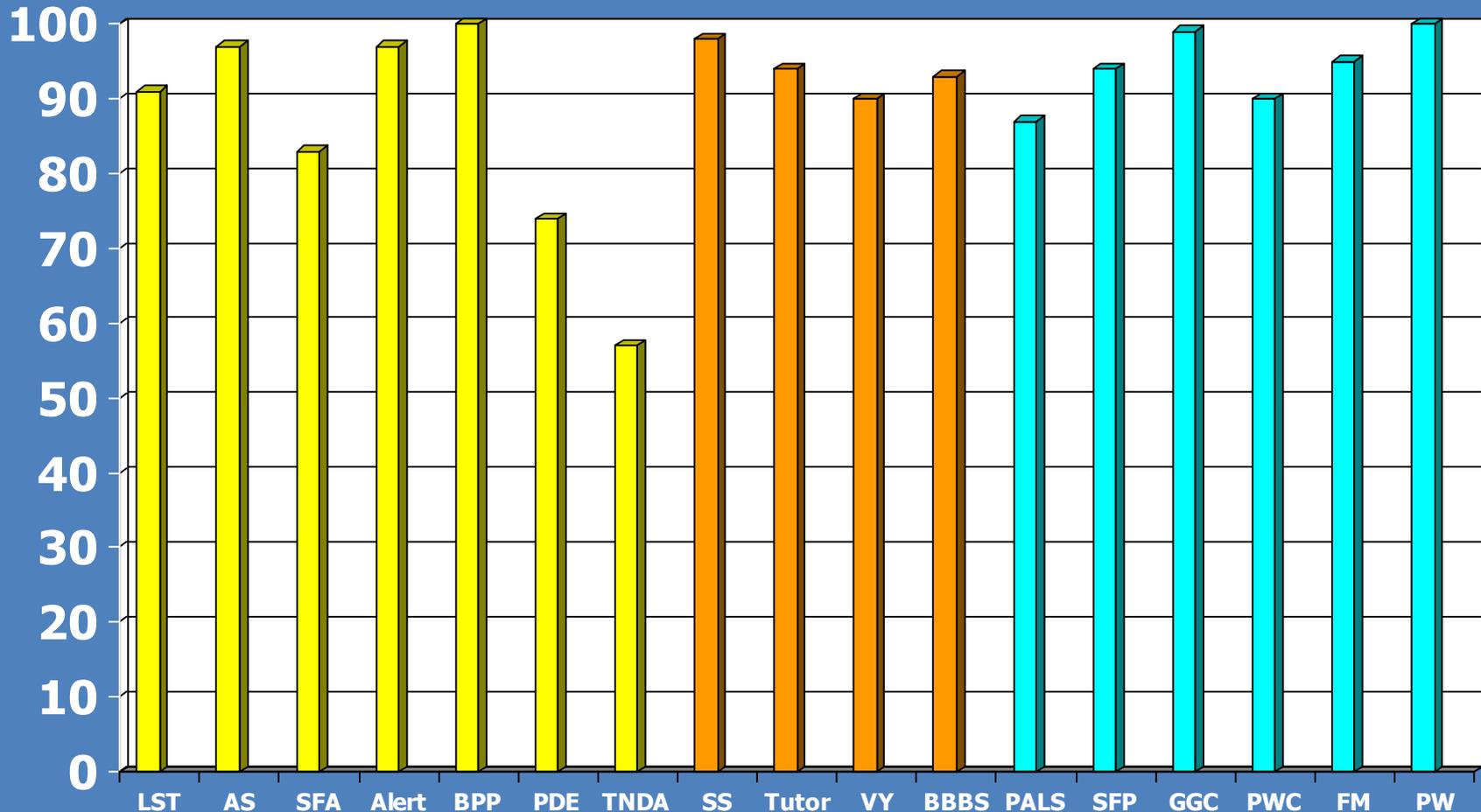
- Training for all program implementers
- Fidelity “checklists” to rate adherence
- Observations to rate adherence and quality
- Documentation of attendance
- Local monitoring and quality assurance by community coalitions
- External monitoring



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# CTC Achieves High Implementation Fidelity

Percentage of material taught or core components achieved averaged across all programs and communities

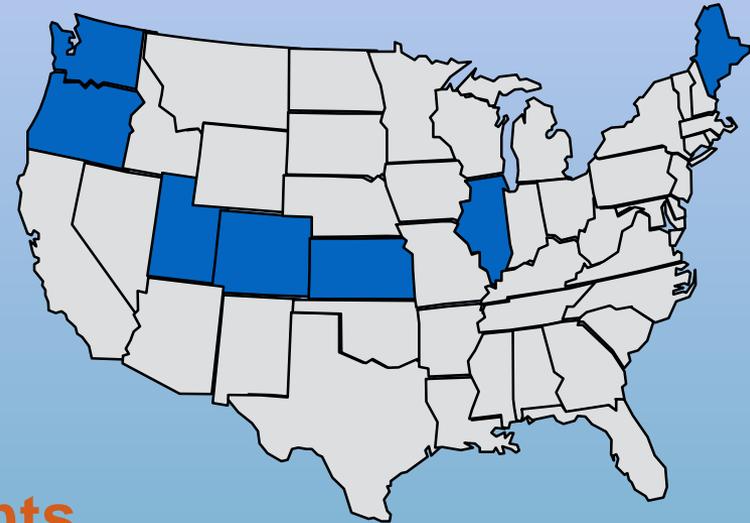


# The Test of Communities That Care

2003-2013

## 24 incorporated towns

- ~ Matched in pairs within state
- ~ Randomly assigned to CTC or control condition



## Longitudinal panel of 4407 students

- ~ All 5<sup>th</sup> graders in public schools
- ~ Surveyed annually from grade 5



# Sustained Effects through High School

In CTC communities:

- **33% had never used alcohol**  
(v. 23% control)
- **50% had never smoked cigarettes**  
(v. 43% control)
- **42% had never engaged in delinquency**  
(v. 33% control)
- **34% had never engaged in violent behavior**  
(v. 41% control)



# Is the Benefit Worth the Cost?



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**W**

# Cost Benefit Summary



Communities That Care is Cost-Beneficial – even when effect sizes are reduced by 50%

- For every **\$1 spent - \$4.23 return** on investment
- Low risk of negative investment return—likely to get a benefit **99 times out of 100**

Washington State Institute for Public Policy, 2013



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## From CTC to CTC PLUS

### Traditional CTC

- Conducted by certified national trainers
- Delivered during 6 full day sessions
- Training new coalition members was difficult
- Refresher training was costly
- No coaching/ta was available



### CTC PLUS

- CTC workshops streamed online to make access easy
- Workshops led by a local facilitator trained by UW
- Workshop content available to coalition members online
- Proactive coaching/ta from Center for CTC at UW





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## Web streamed workshops

- Content provided by experts in brief videos followed by checks for understanding and activities to ensure learning and application
- Workshops divided into 50 modules with facilitator guides
- 3 types of video content (122 total videos):
  1. Big idea
  2. Instructional
  3. Testimonial



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## Table Talk

What did I hear worth remembering?

What do we want to ask or discuss with David?





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**Thank you!**

J. David Hawkins

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[www.communitiesthatcare.net](http://www.communitiesthatcare.net)

